THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte BERND SCHAEFER, ERNST BUSCHMANN and
GERNOT REISSENWEBER

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Appeal No. 1997-2797
Application 08/199,286

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ON BRIEF

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Before GARRIS, PAK and OWENS, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-7 which are all of the claims in the application.

The subject matter on appeal relates to a process for the preparation of certain phosphorane derivatives and to a process for the preparation of certain olefinically

unsaturated compounds. This appealed subject matter is adequately illustrated by independent claims 1 and 5, a copy of which is appended to this decision.

The following references are relied upon by the examiner as evidence of obviousness:

Regitz, Methods of Organic Chemistry, Vol. E1, pgs. 636-639 (1982).

March, Advanced Organic Chemistry, 3rd ed., pg. 847 (1985).

Claims 1-4 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Regitz.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over March.

OPINION

Neither of the above noted rejections can be sustained.

The Section 103 Rejection Over Regitz

The process defined by appealed claim 1 distinguishes over the process of Regitz via the claim recitation "wherein the chlorination is carried out in the presence of an alkali metal hydroxide as hydrogen chloride acceptor and the chlorine and said base are fed to the reaction mixture concurrently but separately at the rates at which they are consumed, such that

the pH does not rise above 9 throughout the reaction". In contrast, the process of Regitz effects halogenation to form phosphonium salts which are then isolated and converted by a suitable base into the desired phosphorane product. It is the examiner's fundamental position that it would have been obvious to modify this prior art process in such a manner that the chlorine and base are "fed to the reaction mixture concurrently but separately at the rates at which they are consumed, such that pH does not rise above 9" as required by appealed claim 1.

As support for this position, the examiner urges that "[t]he disclosed reaction [of Regitz] is sufficient to motivate one of skill in the art to carry out the process as claimed, as the presence of the base is to neutralize the acid formed by the reaction of chlorine and phosphorane" and that, "[a]s to applicants' requirement that the base and chlorine be added to the reaction mixture concurrently but separately, at the rates which they are consumed, one of skill would recognize that in order to maintain the neutrality of the acid, addition of base and chlorine would have to be at the rate of consumption", (answer, page 3). We agree with the

appellants, however, that the support proffered by the examiner for his obviousness conclusion is evidentially inadequate.

The Regitz reference clearly teaches adding a suitable base after isolation of the phosphonium salts formed during the halogenation step. Notwithstanding the examiner's contrary view, nothing in this reference would have suggested modifying this process in such a manner as to result in the appellants' claimed process wherein the chlorine and base are fed concurrently. Stated differently, the record before us contains no evidence that an artisan with ordinary skill would have regarded the sequence and isolation teachings of Regitz as superfluous teachings which should be ignored rather than followed.

In light of the foregoing we cannot sustain the examiner's § 103 rejection of claims 1-4 and 7 as being unpatentable over Regitz.

The Section 103 Rejection over March

On page 4 of the answer, the examiner sets forth the following rationale in support of his obviousness conclusion:

Applicants claim the formation of olefinically

> unsaturated compounds from the reaction of the halogenated phosphorane with an aldehyde or ketone. March teaches the reaction of an aldehyde or ketone with a phosphorane to form olefinically unsaturated compounds. One of skill in the art would be motivated to apply the teaching of March to form olefinically unsaturated compounds in the manner described by applicants. Further, the mere used [sic, use] of a different starting material, whether novel or known, in a conventional process to produce the produce that one would expect therefrom, does not render the process unobvious. In re Surrey et al. (CCPA 1963) 319 F.2d 233, 183 USPQ 67; In re Kanter (CCPA 1963) 399 F.2d 249, 158 USPQ 331.

The examiner's above quoted rationale is clearly deficient for reasons fully detailed in the cases of In re Ochiai, 71 F.3d 1565, 1569-1572, 37 USPQ2d 1127, 1131-1133 (Fed. Cir. 1995) and In re Brouwer, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995). It follows that we also cannot sustain the examiner's § 103 rejection of claims 5 and 6 as being unpatentable over March.

## SUMMARY

The decision of the examiner is reversed.

REVERSED

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|---|---|---|
| BRADLEY R. GARRIS<br>Administrative Patent Judge | ) | |
| CHUNG K. PAK<br>Administrative Patent Judge | ) | BOARD OF PATENT<br>APPEALS AND<br>INTERFERENCES |
| TERRY J. OWENS<br>Administrative Patent Judge | ) | |

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APPENDIX

1. A process for the preparation of "-chloromethylene-triorganylphosphorane derivatives of the formula I

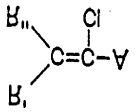
(I)'

in which the radicals R can be the same or different and denote C-organic substituents and A stands for cyano or a group CO-B where B is a C-organic or O-organic radical which has from 1 to 12 carbon atoms and is inert under chlorination conditions, by chlorination of phosphoranes of formula II

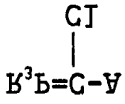
(II)'

with chlorine, wherein the chlorination is carried out in the presence of an alkali metal hydroxide as hydrogen chloride acceptor and the chlorine and said base are fed to the reaction mixture concurrently but separately at the rates at which they are consumed, such that the pH does not rise above 9 thoughout the reaction.

5. A process for the preparation of olefinically unsaturated compounds of formula V



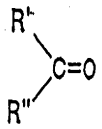
in which R' and R'' denote hydrogen or C-organic radicals which comprises: reacting a "-chloromethylene-derivative I



triorganylphosphorane

in which the radicals R can be the same or different and denote C-organic substitutents and A stands for cyano or a group CO-B where B is a C-organic or O-organic radical which has from 1 to 12 carbon atoms and is inert under chlorination conditions, with a carbonyl compound IV

wherein the derivative I is present in the reaction mixture formed by the process defined in claim 1.

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